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ABSTRACT

The author cites examples of superstitious beliefs and negative attitudes toward disabled persons in developing countries, and suggests steps toward attitudinal change, including public education and socialization of the handicapped. Briefly reviewed are results of a study on the role of information about the handicapped as a variable in attitudinal change. (CL)

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ATTITUDES TOWARD THE HANDICAPPED IN DEVELOPING COUNTRIES AND STEPS TOWARD ATTITUDINAL CHANGE

"Issues of Social Adjustment and Societal Attitudes: A Comparative Perspective"

A paper presented at the First World Congress on Future Special Education
University of Stirling, Scotland
June 25 - July 1, 1978

by

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General Background:

Investigations recently carried out by this speaker, involving as many as nineteen developing countries, notably among which are Kenya, Thailand, Taiwan (Republic of China), Malaysia, Swaziland, Ethiopia, Ghana and Iran confirm the belief that attitudes of the general public towards the handicapped, or disability in general, are similar in nature. In the main, these attitudes are rooted in superstitions and man's natural tendency to ascribe to supernatural beings that which he cannot explain rationally. In civilized countries like America and some nations of Europe, these superstitious beliefs which still hold many a developing country in thraldom, are referred to as "myths" and "folklores", implying that beliefs in them no longer hold sway. Even so, Wright (1969) tells us that the "myths" about disability is still part of the American folklore which "strongly influences people in their attitudes towards the disabled, because they seem so necessarily true and compelling that both laymen and experts succumb to their power and either ignore facts that belie them or distort facts to fit them." In developing countries beliefs about causes of disabilities, or particular afflictions tend to condition attitudes and reactions to the disabled individual. The commonality or universality of some of these beliefs compels me to cite a few instances here, if only to explain the general negative attitudes and discriminatory practices not only against the handicapped person as an individual but also, in many cases, against his entire family or clan.

In many West African countries including Nigeria and Ghana, handicapping conditions such as deafness, blindness, mental retardation, orthopaedic impairments, etc., are attributed to punishment by vengeful gods for wrongs

done in the present or past incarnations, including infidelity of parents, wanton murder, violation of time-honoured traditions, eating prohibited foods, fishing in sacred waters, refusal to appease ancestral gods with sacrifices, and heedlessness on the part of expectant mothers who expose certain parts of their body, or walk in the dark at odd hours. In a number of developing countries there is a strong belief in witchcraft, evil spirit and demons who parade the streets at night causing havocs in the form of disabilities to those who ignore their warnings, appropriate property not belonging to them or refuse love overtures of mermaids. In northern Kenya, around Lake Victoria, for example, the belief is strong that a congenitally deaf child is concealing some secrets from his family. As he would not divulge some bad news confided to him by a god, he opts to be "deaf and dumb." Among some tribes in Nigeria some forms of deafness are attributed to similar beliefs. If a man had been to subservient, servile and imprudently obedient, and as a result, met his death, he chooses in his next incarnation to be "deaf and dumb" to avoid being "Every man's Jack." Other causes of handicaps include: ridiculing disabled persons, failure to fulfil marriage commitments (defaulting in the payment of dowry or bride-price), inscrupulous acquisition of wealth (Kenya, Nigeria, Swaziland etc.), a pregnant woman watching a silent movie (or show), or eating the core of a pineapple (Malaysia), heredity, vegeance of gods on couples for frequent bickerings, especially at night, and a hasty re-marriage on the part of a widow. The list is seemingly endless. It is necessary, however, to emphasize that in many a developing nation, owing to the rapid diffusion of learning and civilization, the only significance of these beliefs is in the die-hard negative attitudes toward the handicapped to which they have contributed.

Attitudes Towards the Handicapped In Developing Countries:

Unfortunately, few research studies have been done, particularly in countries of black Africa, on attitudes towards the handicapped as a group or specific categories of the disabled. Nevertheless, evidence abounds to support the fact that prejudice against the disabled is almost universal, and affects their social, economic, educational, mental and psychological well-being. From the days of Aristotle who equated deafness to mental incapacity to the present day, the handicapped have had to fight more or less a losing battle in many developing countries to be conceded the right to life as human beings. In certain communities they are not even considered acceptable gifts to the gods. They are "a taboo, an embarrassing spectacle, a disgrace not only to their families, but also to their tribes." Many are still abandoned in the bush because they are considered liabilities. More humane families keep them indoors to avoid their infecting others. Marriage with members of such families is unthinkable, at least, until they have been "quarantined" through generations of purification.

In parts of North eastern Africa including Ethiopia, Somalia and the Northern area of Lake Victoria, a handicapped individual rarely aspires to a position higher than that of a semi-skilled worker, regardless of how qualified or capable. Most are engaged in menial occupations. The general official attitude is that the government's obligations are limited to providing only the basic needs for food and shelter. In Ethiopia, for instance, where they are referred to as "Dikuman" (helpless people incapable of self support) they are treated as despicable "pensioners" because of their dependence on government's (albeit) meagre support. Many of my

sources report underdevelopment and exploitation of the handicapped by their employers, co-workers and even teachers. In their leisure time they are rarely allowed to mingle with their peers, for fear of contamination. It must be admitted, however, that treatment varies from community to community, depending on the nature of beliefs that provide a basis for attitudes. In common with Kenya, in some parts of West Africa, for instance, a whole clan or tribe may accept blame for a handicapped member of the tribe, and to make up to the gods believed to have been wronged, the clan may over-indulge the disabled member, even to the extent of marrying for him. Again, in some communities, attitudes are characterized by extreme emotionalism and unwarranted pity. A group of expectant mothers in the waiting room of a pre-natal clinic were unaware that one of them was a deaf lady, until someone who knew her moved across the room to ask her a question in sign language. Imagine the reaction of the other women. They all sobbed. It was too touching to think that a deaf woman could also be expecting a baby!

As observed by a Kenyan correspondent, people with visible handicaps such as the blind, the cripple, etc., suffer more from discrimination and maltreatment than those with hidden disabilities. Many a deafman is happily spared from disdain or even ridicule in surroundings where he is unknown or undetected. Fingerspelling or sign language can sometimes create psychological problems in such situations.

Steps Toward Attitudinal Change:

Among steps suggested by some of my correspondents in developing countries, as conducive to a favourable change of attitude towards the handicapped are: (1) Education of the masses on the characteristics

and needs of the handicapped. (2) Involvement of the handicapped in the social activities of their communities, including sporting activities, drama and cultural displays. (3) Television and radio programmes featuring both the handicapped and the non-handicapped. (4) Legislative measures to guarantee the rights of the handicapped. (5) De-emphasis on segregation of handicapped children in special schools, and increased emphasis on integration of handicapped children with their non-handicapped peers in regular schools. (6) Creation of cooperatives for both handicapped and non-handicapped craftsmen. (7) Extensive involvement of vocational rehabilitation agents (vocational counsellors, placement officers etc.) in the promotion of favourable attitudes towards the handicapped among employers and the general public.

Many of these suggestions have, no doubt, been empirically applied and found to be effective. Others have formed subjects of research studies and have thus been validated. One or two, however, warrant some comments which should be made here before I present a brief report on a short study recently carried out at the University of Ibadan to determine the direction of attitudinal change when the focus of orientation is first on the disability, and then on the ability of the handicapped.

Education of the Masses:

Safford (1978), summarizing contributions of behavioural and social sciences to the creation of positive attitude change towards the handicapped, has pointed out that "If ignorance fosters fear and hostility, knowledge can help in combating such restrictive attitudes." In most developing countries the generality of the public are grossly ignorant of the characteristics, potentials and needs of the handicapped, because they derived

their initial negative attitudes from superstitious beliefs about the causes of handicaps. There must, therefore, be an all-out campaign at the national, state and local levels, to re-educate the public by means of the press, radio, television, leaflets, posters, filmshows, public lectures etc., to shift attention from the so-called disabilities of the handicapped to their abilities, capabilities and potentials which could be harnessed to make them not only self-supporting members of their communities, but also happily contributing members of their society. It is noteworthy that some developing countries are already involved in mass education of this nature. In Iran there is a bi-weekly television programme for the deaf and the public on the Iranian Educational Television Channel. Titled "Breaking the Silence," the programme features: news for the deaf in total communication, Persian Sign Language instruction and answers to letters of general interest sent in by the public, the deaf themselves, or their families. There are other countries which have, or could start similar television programmes on a regular basis. This could lead to some form of collaboration and/or exchange of ideas between such countries.

Legislative Measures:

Several legislative Acts dating from 1863 have eliminated countless barriers, and guaranteed to the handicapped in the United States human rights that make that country a unqiue model as far as provision of services for the handicapped is concerned. Wise national, state and local laws will not only create positive attitudes towards the handicapped, but can also widen employment opportunites for them by compelling employers to indicate the percentage or number of available posts which should be reserved for qualified handicapped persons. The case of Taiwan (Republic

of China) deserves mention. Between 1964 and 1975, four major Acts enacted provide for:

1. A nine year fundamental education for school-age children including the physically-handicapped, the mentally retarded and gifted children.
2. Involvement of local education authorities in the provision of Special Education programmes for all exceptional children.
3. Criteria and guidelines for identifying and placement of exceptional children.
4. Additional training which regular classroom teachers must have to qualify them as teachers of exceptional children.

In Nigeria, a most significant landmark was reached in 1977, when our Federal Government promulgated a National Policy on Education, which, among other things, stipulates that:

1. "Education of handicapped and gifted children will be free at all levels, up to the university level where possible."
2. "A census will be taken of all handicapped children and adults, by age, by sex, by locality and by type...."
3. Provision has been made for the establishment of a National Teachers College for Special Education. (This is already established.)
4. "All Teacher Training Colleges will provide general and basic courses to all prospective teachers who will teach in regular schools, but who require such knowledge to identify and help handicapped children...."

5. "...Special classes and units will be provided in the ordinary schools under the Universal Primary Education Scheme: to facilitate integration of handicapped children with their non-handicapped peers."
6. "Vocational Schools will be made to reserve places for further education of handicapped children and adults...."
7. "Children's clinic will be attached to most hospitals for early identification of handicapped children and for curative measures and medical care ...."

We, Nigerian educators of handicapped children, are, no doubt, gratified and thankful to our Federal Government for these enlightened measures, which, when fully implemented, will make Nigeria a show-piece for the rest of the world as far as education and rehabilitation of the handicapped are concerned.

Information as a Factor in Attitudinal Change

There have been several studies of attitudes towards the handicapped as a group, and towards specific categories of disabled individuals. Studies of the first type include investigations by Jones, (1974), Higgs (1975). Among the second kind of studies may be cited those of Horowitz and Rees (1962), Jones and Sisks (1967). Of particular relevance to attitude formation and attitudinal change is Higgs' study which investigated the roles of the degree of contact with the disabled and information about them as variables in attitude formation or attitudinal change. A major conclusion drawn from this study is that attitudes cannot be regarded as permanent or static. In the words of Higgs, "they change as a result of

advancing age, related experiences and changes in an individual's level of information." This finding is particularly true in developing countries of Africa where negative attitudes towards the handicapped, stemming from superstitious beliefs, heathen taboos and traditional dogmas, are fast changing with the diffusion of mass education and general literacy, aided by the mass media. The present study was carried out to determine the direction of attitudes when the focus of orientation is on disability, and also the effects of additional information on the ability of the handicapped, on attitudinal change.

Procedure:

A five point rating scale was developed to rate a heterogeneous group of eight subjects (made up of six handicapped and two non-disabled individuals) on five paired characteristics, viz. "intelligent and imaginative," "warm and friendly," "mature and dependable," "able and efficient," "self-controlled and peaceful."

The rating was done by 38 raters drawn randomly from undergraduate students majoring in teacher education and educational management, respectively. Each rater was required to rate each of the eight subjects three times (R_1 R_2 R_3) and was given a set of three rating forms labelled A, B, and C. Labels reading S1, S2, S3 ... S8 pinned on the eight subjects, corresponded to sections in the rating scale. The subjects comprised: two deaf boys aged 24 and 28, (S1, S7) who were not wearing any hearing aids; one deaf girl aged 20 (S4) who also had nothing on her to show that she was hearing-impaired; a crippled girl on crutches, aged 22 (S3); a cerebral-palsied boy aged 24 (S6); a partially-blind undergraduate student (S5); a non-handicapped boy aged 24 (S2) and a non-

handicapped undergraduate student (S8) aged 28.

For the first rating, the subjects were lined up before the raters without any orientation. After the raters had completed the rating on Forms A and handed these to the experimenter, a little orientation with emphasis on each subject's disability was given. The raters were then requested to complete Forms B. After these were handed in, the experimenter gave more orientation focussing this time on the academic and ability capability of each subject. The raters then completed Forms C.

Results and Discussion:

Table (A) presents the percentage scores of the subjects on the paired characteristics, while Table B (1-3) shows the difference between pairs of means of the ratings. On intelligence and imaginativeness the deaf subjects scored lower on the second rating than on the first, but significantly higher on the third rating than the first. The partially-blind subject as well as the crippled subject, however, scored slightly higher on the second rating than the first, but significantly higher on the third rating than either the first or the second. The cerebral-palsied subject had the same score on the second as on the first rating, but scored significantly higher on the third rating. One of the two non-handicapped subjects scored slightly higher on the first than on the second one, but significantly higher on the third than on the first. The other was only significantly higher on the second rating than the first.

Ratings on "friendliness and warmth" followed the same pattern as ratings on intelligence, except that one of the deaf subjects scored slightly higher on the second rating than the first, while the other two deaf subjects had the same scores on the second rating as on the first.

But all three subjects scored significantly higher on the third rating. The partially blind subject scored 13% higher on the second rating than the first, but scored significantly higher on the third than on the first rating. He had the same score on the third as on the second.

On "maturity and dependability," the crippled subject and the cerebral-palsied obtained average scores on the first and second ratings, but, whereas the cripple scored 40% higher on the third rating, the cerebral-palsied obtained only 5% higher score on the third rating, although this is significant at the .05 level.

Scores on "able and efficient" reveal the same pattern as scores on "intelligence and imaginative," with nearly all the handicapped subjects scoring slightly higher on the first rating than the second, and significantly higher on the third rating than either the second or the first rating, except S1 and S7.

Although scores on "self-controlled and peaceful" exhibited the general pattern observable in the other sections, with the handicapped subjects obtaining slightly lower (or the same) scores on the second rating than the first, it is interesting to note that the non-handicapped subjects obtained lower scores on the third than the second rating. In contrast, all the handicapped except one deaf subject, obtained higher scores on the third than any of the other ratings. In fact, the most severely handicapped, the cerebral-palsied subject obtained a score which is 35.26% higher than his score on the second rating.

The result of this study provides further evidence in support of the fact that the initial attitude towards the handicapped individual is more likely to be negative than positive. This is particularly true with

respect to the deaf individual who looks very much like any other person until it is suddenly discovered that he is severely handicapped. This study also confirms findings by other investigators that a major factor in a favourable change of attitude towards the handicapped is experience with the handicapped individual, including the kind and nature of information given about him.

To conclude this paper, I must say that the time has come for all who are involved in the identification, treatment, education, rehabilitation and promotion of the welfare of exceptional children to regard themselves as a united group of dedicated servers and to extend hands of fellowship and cooperation across national boundaries to their colleagues in underdeveloped and developing countries so that there may not be even a single weak link in the long chain of all workers for exceptional children.

References

Horowitz, L. S. and Rees, N. S. "Attitudes and Information About Deafness. Volta Review 1962, 64, 180-189.

Jones, R. L. and Sisk D. "Early Perceptions of Orthopaedic Disability." Exceptional Children 1967, 34, 42-43.

Jones, R. L. "The Hierarchical Structure of Attitudes Toward the Exceptional Children." Exceptional Children 1974, 40, 430-435.

Higgs, R. W. "Attitude Formation - Contact or Information." Exceptional Children, 1975, 41, 496-497.

Safford, P. L. Teaching Young with Special Needs. St. Louis: C. V. Mosby Company, 1978, 290-305.

McGowon, J. F. and Porter, T. L. An Introduction to the Vocational Rehabilitation Process. U. S. Department of H.E.W., 1967.

Wright, Beatrice A. "Some Psychological Aspects of Disability." Vocational Rehabilitation of the Disabled. New York: University Press, 1969.

Federal Ministry of Information. Federal Republic of Nigeria National Policy on Education. 1977.

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Table A

Percentage Scores of the Subjects on the Five - paired Characteristics

	INTELLIGENT AND IMAGINATIVE			WARM AND FRIENDLY			MATURE AND DEPENDABLE			ABLE AND EFFICIENT			SELF CONTROLLED AND PEACEFUL		
	R-1 %	R-2 %	R-3 %	R-1 %	R-2 %	R-3 %	R-1 %	R-2 %	R-3 %	R-1 %	R-2 %	R-3 %	R-1 %	R-2 %	R-3 %
S-1	85.79	83.16	91.05	75.26	81.05	85.78	83.68	73.16	92.83	84.21	77.89	90.53	85.26	84.74	91.57
S-2	75.26	78.95	82.11	73.16	75.26	80	83.68	73.16	83.68	75.79	80	64.74	89.47	89.47	85.26
S-3	63.16	66.84	92.11	69.47	72.63	84.21	46.84	50.53	91.58	53.16	53.68	77.37	70.53	65.79	77.37
S-4	83.68	78.95	91.05	75.26	75.26	84.21	78.42	77.37	86.32	74.21	72.63	85.79	78.95	81.58	89.47
S-5	58.42	67.37	82.63	67.37	80.53	80.53	83.68	82.11	88.95	71.05	68.42	80	81.05	85.79	90.00
S-6	62.11	62.11	80.53	56.84	58.42	71.05	50.53	57.37	66.84	61.58	55.26	71.59	67.89	64.74	100.00
S-7	84.21	81.58	92.11	76.32	76.84	91.05	82.63	85.26	85.75	87.89	81.05	85.79	82.11	85.26	83.68
S-8	91.89	93.68	95.26	86.32	66.32	91.05	92.11	94.74	93.16	91.05	93.68	93.16	92.63	91.57	79.47

Table B'

Differences Between Ratings of the Eight Subjects on the Five Paired Characteristics

Note: R_1 = Mean ratings without any orientation.

R_2 = Mean ratings after orientation of raters to handicaps.

R_3 = Mean ratings after orientation of raters to both handicaps and abilities of disabled subjects.

Subjects: S_1 (deaf)	N = 38							N = 38							N = 38 = ?						
TESTS	R_1 Mean	SD	R_2 Mean	SD	df	t	Level of signi-ficance	R_1 Mean	SD	R_3 Mean	SD	df	t	Level of Signi-ficance	R_2 Mean	SD	R_3 Mean	SD	df	t	Level of Signi-ficance
Int.&Imag.	4.29	0.50	4.16	0.72	74	0.94	ns	4.29	0.50	4.55	0.55	74	-2.17	0.05	4.16	0.72	4.55	0.55	74	-2.65	0.01
Warm & Frdly	3.76	0.77	4.05	0.61	74	-1.87	0.10	3.76	0.77	4.21	0.57	74	-2.81	0.01	4.05	0.61	4.21	0.57	74	-1.18	ns
Mat. & Dep.	4.30	0.86	3.66	0.82	73	3.33	0.01	4.30	0.86	4.63	0.54	73	-1.99	0.05	3.66	0.82	4.63	0.54	74	-5.88	0.001
Able&Effic.	4.21	0.73	3.89	0.97	74	1.64	ns	4.21	0.73	4.53	0.55	74	-1.33	ns	3.89	0.97	4.58	0.55	74	-3.39	0.01
Self Cont.& Peaceful	4.26	0.82	4.24	0.84	74	.0.10		4.26	0.82	4.58	0.66	74	-1.87	0.10	4.24	0.84	4.58	0.66	74	-2.00	0.05
S_2 (Non-handicapped)																					
Int.&Imag.	3.76	0.77	4.05	0.84	74	-1.08	ns	3.76	0.77	4.11	0.41	74	-2.48	0.01	4.05	0.84	4.11	0.41	74	-0.39	ns
Warm&Frdly.	3.66	0.76	3.86	0.70	73	-1.19	ns	3.66	0.76	4.00	0.69	74	-2.05	0.05	3.86	0.70	4.00	0.69	73	-0.87	ns
Mat. & Dep.	3.79	1.05	3.76	0.89	72	0.13	ns	3.79	1.05	4.18	0.68	74	-1.92	0.10	3.76	0.89	4.18	0.68	72	-1.08	ns
Able&Effi't	3.79	0.95	4.11	0.85	73	-1.54	ns	3.79	0.95	4.18	0.64	74	-2.09	0.05	4.11	0.85	4.18	0.64	73	-0.41	ns
Self Control Peaceful	4.47	1.08	4.05	0.94	73	1.81	0.10	4.47	1.08	4.26	0.64	74	1.03	ns	4.05	0.94	4.26	0.64	73	-1.13	0.30
S_3 (Cripple)																					
Int.&Imag.	3.16	0.85	3.34	0.80	73	-0.95	ns	3.16	0.85	4.61	0.65	73	-8.28	0.001	3.34	0.80	4.61	0.65	74	-7.60	0.001
Warm&Frdly	3.47	0.74	3.63	0.71	74	-1.00	ns	3.47	0.74	3.84	0.59	73	-2.40	0.01	3.63	0.71	3.84	0.59	73	-1.16	ns
Mat.&Dep.	2.34	0.98	2.53	0.93	74	-0.87	ns	2.34	0.98	3.26	1.14	74	-4.10	0.001	2.53	0.93	3.26	1.14	74	-3.04	0.01

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Table B2

Differences Between Ratings of the Eight Subjects on the Five-Impaired Characteristics contd.

Note: R_1 = Mean ratings without any orientation.
R_2 = Mean ratings after orientation of raters to handicaps.
R_3 = Mean ratings after orientation of raters to both handicaps and abilities of disabled subjects.

Subjects:

TESTS	R_1 Mean	SD	R_2 Mean	SD	df	t	Level of Significance	R_1 Mean	SD	R_3 Mean	SD	df	t	Level of Significance	R_2 Mean	SD	R_3 Mean	SD	df	t	Level of Significance
S_3 (cripple)	N = 38							N = 38							N = 38						
Able&Eff't	2.66	0.97	2.76	0.82	73	-0.48	ns	2.66	0.97	3.87	0.81	74	-5.90	0.001	2.76	0.82	3.87	0.81	73	-5.84	0.001
Self Control & Peaceful	3.53	0.94	3.38	0.56	73	0.84	ns	3.53	0.94	4.00	0.86	74	-2.27	0.05	3.38	0.56	4.00	0.86	73	-3.71	0.001
S_4 (deaf)																					
Int.&Imag.	4.18	0.79	3.95	0.83	74	0.97	ns	4.18	0.79	4.55	0.54	74	-1.85	0.10	3.95	0.83	4.55	0.54	74	-3.73	0.001
Warm&Frdly.	3.76	0.86	3.76	0.87	74	0	ns	3.76	0.86	4.22	0.69	74	-2.57	0.01	3.76	0.87	4.22	0.69	74	-2.55	0.01
Mat. & Dep.	3.92	0.93	3.87	0.98	74	0.23	ns	3.92	0.93	4.32	0.69	74	-2.13	0.05	3.87	0.98	4.32	0.69	74	-2.37	0.05
Able&Eff't	3.71	0.94	3.73	0.86	73	-0.10	ns	3.71	0.94	4.05	0.69	73	-1.79	0.10	3.73	0.86	4.05	0.69	72	-1.78	0.10
Self Control & Peaceful	4.05	0.98	4.08	0.68	73	-0.15	ns	4.05	0.98	4.47	0.59	73	-2.24	0.05	4.08	0.68	4.47	0.59	74	-2.67	0.01
S_5 (partially-blind)																					
Int.&Imag.	3.08	1.14	3.46	1.06	71	-1.47	ns	3.08	1.14	4.13	0.70	72	-4.77	0.001	3.46	1.06	4.13	0.70	73	-3.04	0.01
Warm&Frdly.	3.24	0.97	3.37	1.04	73	-0.30	ns	3.24	0.97	4.03	0.74	73	-3.97	0.001	3.37	1.04	4.03	0.74	74	-3.14	0.01
Mat. & Dep.	4.30	1.06	4.11	0.91	73	0.83	ns	4.30	1.06	4.47	0.46	73	-0.89	ns	4.11	0.91	4.47	0.46	74	-2.18	0.05
Able&Eff't	3.65	1.19	3.42	1.04	73	0.89	ns	3.65	1.19	4.00	0.69	73	-1.56	0.10	3.42	1.04	4.00	0.69	74	-2.90	0.01
Self Control & Peaceful	4.16	0.80	4.29	0.64	73	-0.69	ns	4.16	0.80	4.50	0.60	73	.83	0.10	4.29	0.64	4.50	0.60	74	-1.48	ns

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Table B3

Differences Between Ratings of the Eight Subjects on the Five-Paired Characteristics contd.

Subjects: S_6 (cerebral palsied-m'ldly-retarded) N = 38	R_1		R_2					R_1		R_3					R_2		R_3				
TESTS	Mean	SD	Mean	SD	df	t	Level of Significance	Mean	SD	Mean	sd	df	t	Level of Significance	Mean	SD	Mean	SD	df	t	Level of Significance
Int.&IMag.	3.19	0.65	3.19	0.65	72	0	ns	3.19	0.65	4.03	0.81	73	-4.94	0.001	3.19	0.65	4.03	0.82	73	-4.97	0.001
Warm&Frdly.	3.00	0.85	3.00	0.88	71	0	ns	3.00	0.85	3.55	0.63	72	-3.14	0.01	3.00	0.88	3.55	0.63	73	-3.11	0.01
Mat. & Dep.	2.74	1.02	2.95	0.98	70	-0.91	ns	2.74	1.02	3.43	0.91	70	-3.07	0.01	2.95	0.98	3.43	0.91	72	-2.18	0.05
Able&Eff't	3.16	1.03	2.84	0.58	73	1.68	0.10	3.16	1.03	3.67	0.90	72	-2.28	0.05	2.84	0.58	3.67	0.90	73	-4.74	0.001
Self Control & Peaceful	3.58	0.90	3.32	0.87	71	1.24	ns	3.58	0.90	3.68	0.76	72	-0.53	ns	3.32	0.87	3.68	0.72	73	-2.00	0.05
S_7 (deaf)																					
Int.&Imag.	4.21	0.86	4.08	0.85	74	0.68	ns	4.21	0.86	4.61	0.49	74	-2.48	0.01	4.08	0.85	4.61	0.49	74	-3.31	0.01
Warm&Frdly.	3.81	1.00	3.84	0.96	74	-0.14	ns	3.81	1.00	4.55	0.59	74	-3.94	0.001	3.84	0.96	4.55	0.59	74	-3.88	0.001
Mat & Dep.	4.13	0.92	4.26	0.82	74	-0.65	ns	4.13	0.92	4.53	0.49	72	-2.35	0.05	4.26	0.82	4.53	0.49	72	-1.73	0.01
Able&Eff't	4.39	0.82	4.05	0.82	74	1.81	0.10	4.39	0.82	4.64	0.48	72	-1.33	ns	4.05	0.82	4.64	0.48	72	-3.81	0.001
Self Control & Peaceful	4.10	0.97	4.26	0.75	74	-0.80	ns	4.10	0.97	4.30	0.60	73	-1.08	ns	4.26	0.75	4.30	0.60	73	-0.26	ns
S_8 (non-handicapped)																					
Int.&Imag.	4.47	0.78	4.81	0.39	74	-2.43	0.05	4.47	0.78	4.76	0.43	74	-2.00	ns	4.81	0.39	4.76	0.43	74	0.56	ns
Warm&Frdly.	4.32	0.86	4.45	0.59	74	-0.76	ns	4.32	0.86	4.55	0.54	74	-1.39	ns	4.45	0.59	4.55	0.54	74	-0.77	ns
Mat. & Dep.	4.61	0.68	4.74	0.71	74	-0.81	ns	4.61	0.68	4.78	0.43	73	-1.56	ns	4.74	0.71	4.78	0.43	73	-0.30	ns
Able&Eff't	4.55	0.71	4.79	0.40	74	-1.85	0.10	4.55	0.71	4.76	0.43	74	-1.55	ns	4.79	0.40	4.76	0.43	74	0.32	ns
Self Control & Peaceful	4.63	0.58	4.70	0.55	74	-0.34	ns	4.63	0.58	4.71	0.50	74	-0.65	ns	4.70	0.55	4.71	0.50	74	-0.08	ns

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RATING SCALE

5 = Agree strongly
4 = Agree
3 = Doubtful/undecided

(Tick (✓) appropriate column)
2 = Disagree
1 = Disagree strongly

	Intelligent & Imaginative					Warm & Friendly					Mature & dependable					Able & efficient					Self-controlled & peaceful				
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
S_1																									
S_2																									
S_3																									
S_4																									
S_5																									
S_6																									
S_7																									
S_8																									